Index of Claims

| Appli | ication/ | Control | No. |
|-------|----------|---------|-----|
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09/838,787

Examiner

Michael J. Fisher

Applicant(s)/Patent under Reexamination

BADGER ET AL.

Art Unit

3629

| √ | Rejected |
|---|----------|
| = | Allowed  |

| _ | (Through numeral)<br>Cancelled |
|---|--------------------------------|
|   | Restricted                     |

| Z | Non-Elected  |
|---|--------------|
| 1 | Interference |

| A | Appeal   |
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| o | Objected |

| Cla         | im       |              |                    |                 |          | Date              | ,  |          |               |          |       | Cla            | im       |                 |          |         | Date                                    | )                  |         |                |       | CI    | aim        |                         |          |          |          | ate      | ;        |          |          |          |
|-------------|----------|--------------|--------------------|-----------------|----------|-------------------|--|----------|---------------|----------|-------|----------------|----------|-----------------|----------|---------|---|--------------------|---------|----------------|-------|-------|------------|-------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
|             |          | 6            |                    |                 |          |                   |  |          |               |          |       |                | <u> </u> |                 |          |         |   | Т                  |         |                |       |       |            |                         |          |          | Ĭ        |          |          |          |          |          |
| Final       | Original | 1/2          |                    |                 |          |                   |  |          |               | -        |       | Final          | Original |                 |          |         |   | - [                |         |                |       | Final | Original   |                         |          |          |          |          |          |          |          |          |
| 這           | Ĕ        | 83<br>US     |                    |                 |          |                   |  |          |               | -        |       | 谨              | ři       |                 |          |         | 1 1                                     |                    |         | H              |       | 這     | Jrig       |                         |          |          | ł        |          |          | - 1      |          |          |
|             |          | 105          |                    |                 |          |                   |  |          |               | -        |       |                |          |                 |          |         | 1 1                                     |                    |         |                |       |       | 0          |                         |          |          |          |          |          |          | l        |          |
|             | 1        | 0            |                    |                 |          |                   |  | Ī        |               |          |       |                | 51       |                 |          |         |   |                    |         |                |       |       | 101        |                         |          |          |          |          |          |          |          |          |
|             | 2        | ī            |                    |                 |          |                   |  |          |               |          |       |                | 52       |                 |          |         |   |                    |         |                |       |       | 102        |                         |          |          |          |          |          |          |          | $\Box$   |
|             | 3        | Π            |                    |                 |          |                   |  |          |               |          |       |                | 53       |                 |          |         |   |                    |         |                |       |       | 103        |                         |          |          |          |          |          |          |          | $\Box$   |
|             | 4        | П            |                    |                 |          |                   |  |          |               |          |       |                | 54       |                 |          |         |   |                    |         |                |       |       | 104        |                         |          |          |          |          |          |          |          |          |
|             | 5        |              |                    |                 |          |                   |  |          |               |          |       |                | 55       |                 |          |         |   |                    |         |                |       |       | 105        |                         |          |          |          |          |          |          |          |          |
|             | 6        | 1            |                    |                 |          |                   |  |          |               |          |       |                | 56       |                 | $\perp$  |         |   |                    |         | Ш              |       |       | 106        |                         |          |          |          |          |          |          |          |          |
|             | 7        | L            |                    |                 |          |                   |  |          |               | ╝        |       |                | 57       |                 |          | $\perp$ |   | $oldsymbol{\perp}$ |         | Ш              |       |       | 107        |                         |          |          |          |          |          |          |          | ╝        |
|             | 8        | Ц            |                    |                 |          |                   |  |          |               |          |       |                | 58       |                 |          |         |   |                    |         | Ш              |       |       | 108        |                         |          |          |          |          |          |          |          |          |
|             | 9        |              |                    |                 |          |                   |  |          |               |          |       |                | 59       | Ш               |          |         |   |                    |         |                |       |       | 109        |                         |          |          |          |          |          |          |          |          |
|             | 10       | ~            |                    |                 |          |                   |  |          |               | ╝        |       |                | 60       |                 | $\perp$  | ┸       |   |                    |         |                |       |       | 110        |                         |          |          | _        |          |          |          |          |          |
|             | 11       | Ш            | $oxedsymbol{oxed}$ | $oxed{oxed}$    |          |                   | l  | [        |               | ╝        |       |                | 61       |                 | $\perp$  | $\perp$ | Ш                                       | $\perp$            |         | Ш              |       |       | 111        |                         |          |          |          |          | [        |          |          |          |
|             | 12       | Ш            | $oxed{oxed}$       | oxdot           | ]        |                   | $ \_                                   $ |          |               | $\Box$   |       |                | 62       |                 |          |         | Ш                                       | $\perp$            |         | Ш              |       |       | 112        |                         |          |          | [        |          |          |          |          |          |
|             | 13       | Ш.           | Щ                  |                 |          |                   |  |          |               | ╝        |       |                | 63       | $\sqcup$        | $\perp$  |         |   | $\perp$            |         | Ш              |       |       | 113        | Щ                       | $\perp$  | _        |          |          |          | $\perp$  |          | _        |
|             | 14       | $\coprod$    | Щ                  | Ш               |          |                   | [  | $\Box$   |               | ╝        |       |                | 64       |                 |          | $\perp$ | $\sqcup$                                | _                  | _ _     | Ш              |       | ļ     | 114        |                         |          | _        | $\Box$   | _        |          |          | $\perp$  | ╝        |
|             | 15       | 1            | Ш                  |                 |          |                   | _  |          | $\perp$       | _        |       |                | 65       | Ш               | _ _      |         | $\sqcup$                                | $\perp$            |         | Ш              |       |       | 115        | $\Box$                  | $\perp$  | ļ        |          |          |          | _        | $\perp$  | 凵        |
|             | 16       | $\perp$      | Ц.                 |                 |          | $\square$         |  |          | $\perp$       | _        |       |                | 66       | Ш               |          |         |   | _                  | $\bot$  | Ш              |       |       | 116        |                         | _        |          |          | _        |          | _        |          | _        |
|             | 17       | L            | Щ                  | Ш               |          |                   |  | $\Box$   | $\perp$       | ᆜ        |       | $oxed{oxed}$   | 67       | Ш               | _ _      |         |   | _ _                |         | Ш              |       |       | 117        | Ш                       |          | _        |          | _        |          | $\dashv$ | _        | _        |
|             | 18       |              |                    |                 |          |                   | $\Box$                                   |          |               |          |       |                | 68       |                 |          | 丄       | 1                                       |                    |         | Ш              |       |       | 118        |                         | _        | _        |          | i        |          |          | _        | _        |
|             | 19       |              |                    |                 |          |                   |  |          |               |          |       |                | 69       |                 |          |         |   |                    |         | Ш              |       |       | 119        |                         |          |          |          |          |          |          | $\perp$  |          |
|             | 20       | 1            |                    |                 | _        |                   | $\Box$                                   | _        | $\perp$       | Ц        |       |                | 70       |                 | _        |         |   |                    | $\perp$ | Ш              |       |       | 120        | $\Box$                  | 4        | _        | _        |          |          | _        | 4        | _        |
|             | 21       | 4            |                    |                 |          |                   |  |          |               | _        |       |                | 71       |                 |          |         |   | _                  | $\perp$ | Щ              |       |       | 121        |                         | _        | _        |          | _        | _        | _        | _        |          |
|             | 22       | Ц            |                    |                 |          |                   |  |          |               | _        |       |                | 72       |                 |          |         |   |                    | Ц_      | Ш              |       |       | 122        |                         |          |          |          | _        |          | _        | $\dashv$ | _        |
|             | 23       | Щ            |                    |                 |          |                   | _  |          | $\perp$       | 4        |       |                | 73       | $\sqcup$        |          | _       |   | _                  |         | Ш              |       |       | 123        |                         | _        | _        |          |          |          | _        | _        | ᆚ        |
| ļ           | 24       | _            |                    |                 |          |                   | _  |          | $\perp$       | 4        |       |                | 74       | $\sqcup$        | _        |         |   | _                  |         | Ш              |       |       | 124        | Ц                       |          |          | _        |          | _        | _        | $\dashv$ | ᆚ        |
|             | 25       | _            |                    |                 | _        |                   | _  | _        | $\rightarrow$ | ᆜ        |       |                | 75       | $\sqcup$        |          |         |   | $\rightarrow$      | $\perp$ | Ш              |       |       | 125        |                         | 4        | _        | _        |          | _        | _        | _        | _        |
| <u></u>     | 26       |              |                    | Ц               |          |                   | _  | _        | $\perp$       | ᆜ        |       |                | 76       | $\sqcup$        |          |         |   | _                  |         | Ш              |       |       | 126        | _                       | _        | _        | _        | _        | _        | _        | 4        | 4        |
| $\perp$     | 27       |              |                    |                 |          |                   | _  |          | _             | 긕        |       |                | 77       | $\sqcup$        |          |         |   | _                  | _       | Ш              |       |       | 127        |                         | _        |          |          |          | _        | _        | 4        | 4        |
|             | 28       | 7            |                    |                 | _        |                   | _  | _        | _             | 4        |       |                | 78       | $\sqcup$        |          | _       |   | _                  | _       | ш              |       |       | 128        |                         | $\perp$  | _        | _        |          |          | _        | $\dashv$ | _        |
|             | 29       | 4            |                    |                 | $\dashv$ |                   | $\dashv$                                 | _        | _             | 4        |       |                | 79       |                 |          |         | $\vdash$                                | _                  | - -     | Ш              |       |       | 129        |                         | 4        | _        | _        | _        |          | _        | $\dashv$ | 4        |
|             | 30       | 4            |                    | $\dashv$        | $\dashv$ |                   |  | _        | -             | 4        |       |                | 80       | $\vdash$        | _        |         |   | -                  |         | $\vdash$       |       |       | 130        | _                       | -        |          | _        |          |          | _        |          | 4        |
|             | 31       | 4            | Щ                  | $\sqcup$        | _        | H                 | _  | 4        | $\perp$       | 4        |       |                | 81       | $\sqcup$        | $\perp$  | +       | $\vdash$                                | $\perp$            |         | $\vdash$       |       |       | 131        |                         |          |          |          | _        |          | _        | $\dashv$ | 4        |
| $\vdash$    | 32       | $\mathbb{H}$ |                    | $\vdash \vdash$ | $\dashv$ |                   | $\dashv$                                 | -        | +             | 4        |       |                | 82       | $\vdash \vdash$ | +        | +       | $\vdash$                                | +                  | +       | $\vdash$       |       |       | 132        | $\vdash$                | $\dashv$ | _        |          |          |          | $\dashv$ | $\dashv$ |          |
| $\vdash$    | 33       | 4            |                    | $\vdash$        |          |                   |  |          | +             | $\dashv$ |       |                | 83       | $\vdash$        | +        | +       | $\vdash$                                | +                  | +       | Н              |       |       | 133        | $\vdash$                | $\dashv$ | -        |          | _        |          | $\dashv$ | $\dashv$ | $\dashv$ |
|             |          |              | -                  | $\mid - \mid$   |          | $\dashv$          | $\dashv$                                 | -        | +             | ᅱ        |       | <b> </b>       | 84       | ┝               |          | +       | $\vdash$                                | -+-                | +       | Н              |       |       | 134<br>135 | $\vdash$                |          | -        |          |          | {        | $\dashv$ | -+       | $\dashv$ |
| -           | 35       |              | H                  | $\vdash \vdash$ | -        |                   |  |          | $\dashv$      | $\dashv$ |       | $\vdash$       | 85       | $\vdash \vdash$ | +        | +       | $\vdash$                                | +                  |         | $\vdash\vdash$ |       |       | 135        | $\mid \rightarrow \mid$ | $\dashv$ | $\dashv$ |          | <b>-</b> |          | $\dashv$ | $\dashv$ | $\dashv$ |
| -           | 36       |              | $\vdash$           | $\dashv$        | -        | -                 | _  |          |               | $\dashv$ |       |                | 86       | ⊢               | +        | +       | $\vdash \vdash$                         | +                  | -       | $\vdash$       |       |       | 136        | $\vdash$                |          |          | -        | -        |          | -+       | -        | $\dashv$ |
| $\vdash$    | 37       | <u> </u>     | $\vdash$           | $\vdash \vdash$ | _        |                   | $\dashv$                                 |          |               |          |       |                | 87       |                 |          |         | $\vdash$                                | +                  |         | $\vdash$       |       |       | 137        |                         |          |          |          |          |          | -+       | $\dashv$ | $\dashv$ |
| $\vdash$    | 38       |              | $\vdash$           | $\vdash \vdash$ | -        | $\rightarrow$     | $\dashv$                                 | $\dashv$ | -             | $\dashv$ |       |                | 88       |                 | -        |         | $\vdash$                                | +                  | _       | $\vdash$       |       |       | 138        | $\vdash$                | $\dashv$ | -        |          | -        |          | -+       | $\dashv$ | $\dashv$ |
| <del></del> | 39       | _            | $\vdash$           | $\vdash$        | -        | $\longrightarrow$ | $\dashv$                                 |          |               | $\dashv$ |       |                | 89<br>90 | $\vdash$        | +        | +       | $\vdash$                                | +                  |         | $\vdash\vdash$ |       | L     | 139<br>140 | $\vdash \vdash$         | -+       |          |          |          |          | $\dashv$ | $\dashv$ | $\dashv$ |
| <u> </u>    | 40       |              |                    | $\vdash \vdash$ | -        | $\dashv$          | $\dashv$                                 | $\dashv$ | +             | $\dashv$ |       |                |          |                 | +        | +-      |   | +                  |         | $\vdash\vdash$ |       |       |            | ⊢⊦                      |          |          |          |          |          | $\dashv$ | $\dashv$ | $\dashv$ |
| $\vdash$    | 41       | <u> </u>     | $\vdash$           | $\vdash \vdash$ |          | $\dashv$          | $\dashv$                                 |          | $\dashv$      | $\dashv$ |       |                | 91       | $\vdash \vdash$ | $\dashv$ | +       | Н                                       |                    | +       | $\vdash$       |       |       | 141<br>142 | ├─┤                     | $\dashv$ | $\dashv$ |          |          | -        | -        | $\dashv$ | $\dashv$ |
|             | 42<br>43 | <u> </u>     | -                  |                 |          |                   | $\dashv$                                 | $\dashv$ | +             | $\dashv$ |       |                | 92<br>93 | $\vdash$        | +        | +       | $\vdash\vdash$                          | $\dashv$           | +       | $\vdash$       |       |       | 142        | $\vdash$                | $\dashv$ | -        |          |          |          | _        | $\dashv$ | $\dashv$ |
|             | 44       | <u> </u>     | H                  | $\vdash \vdash$ |          | -                 |  |          | $\dashv$      | $\dashv$ |       | -              | 94       | <del>   </del>  | +        | +       | $\vdash$                                | +                  | +       | $\vdash$       |       |       | 144        | $\vdash \vdash$         | $\dashv$ |          |          | -        |          | -+       | +        | $\dashv$ |
|             | 45       | <u> </u>     |                    | $\vdash$        | $\dashv$ | $\dashv$          | $\dashv$                                 | -+       | +             | $\dashv$ |       | $\vdash$       | 95       | $\vdash \vdash$ | $\dashv$ | +-      | Н                                       | $\dashv$           | -       | $\vdash$       |       |       | 145        | $\vdash \vdash$         | $\dashv$ | $\dashv$ | -        | $\dashv$ | -        | $\dashv$ | $\dashv$ | $\dashv$ |
|             | 46       |              | $\vdash$           | $\vdash$        | -        | -                 | $\dashv$                                 | $\dashv$ | +             | $\dashv$ |       |                | 96       | $\vdash$        | -        | +       | $\vdash$                                | +                  | +       | $\vdash\vdash$ |       |       | 145        | $\vdash \vdash$         | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | +        | $\dashv$ | $\dashv$ |
| -           | 47       | <u> </u>     | -                  | $\vdash$        |          | -                 | $\dashv$                                 | $\dashv$ | +             | $\dashv$ |       | $\vdash$       | 97       | $\vdash$        | +        | +       | $\vdash \vdash$                         | +                  | _       | $\vdash$       |       |       | 147        | ┈┤                      | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |          | $\dashv$ | $\dashv$ | $\dashv$ |
| -           | 47       | -            | $\vdash$           |                 |          | -                 |  | $\dashv$ | +             | ᅱ        |       | $\vdash\vdash$ | 98       | $\vdash$        | $\dashv$ | +       | $\vdash \vdash$                         | $\dashv$           | +       | $\vdash$       |       |       | 148        | $\vdash \vdash$         | $\dashv$ |          | $\dashv$ | $\dashv$ |          | $\dashv$ | $\dashv$ | $\dashv$ |
| -           | 49       | -            | $\vdash$           | $\vdash$        | $\dashv$ |                   |  | $\dashv$ | +             | ᅱ        |       | $\vdash$       | 99       | $\vdash \vdash$ | $\dashv$ | +-      | $\vdash$                                | $\dashv$           | +-      | $\vdash$       |       | ļ     | 149        | $\vdash \dashv$         |          | $\dashv$ | -        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |
| $\vdash$    | 50       | _            | Н                  | $\vdash$        | $\dashv$ |                   | $\dashv$                                 | -        | +             | $\dashv$ |       |                | 100      | $\vdash$        | $\dashv$ | +-      | -                                       | +                  | +       | +              |       |       | 150        | $\vdash$                | $\dashv$ | $\dashv$ | $\dashv$ | {        | $\dashv$ | ┰        | $\dashv$ | $\dashv$ |
| L           | 30       |              | ш                  | Ш               |          | Ll                |  |          |               |          | ::::: |                | 100      |                 |          |         | لــــــــــــــــــــــــــــــــــــــ | I_                 | _1_     | ш              | .:::: |       | 130        | ш                       |          |          |          |          |          |          |          |          |